BIRDS OF QUEEN VICTORIA SPRING

by VINCENT SERVENTY

INTRODUCTION

A recent visit to Queen Victoria Spring was described by P. Slater and E. Lindgren (*Western Australian Naturalist,* Vol. 5, No. 1, p. 10). The record of their visit, together with the specimens brought back, stimulated the writer to pay another visit to the area. The party, comprising B. A. Y. Main, A. R. Main, R. G. Royce and myself left Perth on 23rd January, 1956, returning 31st January. The area has been described by Slater and Lindgren. Their visit was during a wet period while ours was during a dry one. According to the staff at Cundeelee Mission no rain had fallen in the area since October of the previous year. This meant that the claypan was dry and we had to repeat the experience of Carnegie ("Spinifex and Sand," p. 38) who had to dig out the soak to obtain water. Although we did not use the water for drinking it was quite fresh.

BIRDS OF THE AREA

Giles ("Australia Twice Traversed," Vol. II) mentions the following birds.

Emu *(Dromaius novae-hollandiae).* It was by following the tracks of an emu that Tommy, one of the natives with the party, found Queen Victoria Spring.

Bronzewing Pigeon *(Phaps chalcoptera).* Giles makes the following comment (Ibid, p. 202). "The natives are continually burning the rough grass and spinifex, and on a favourable windy occasion these fires will consume everything green or dry, down to the water's edge. There seems to be very little native game here, although a number of bronzewing pigeons came to water at night and morning." This comment shows that regular firing of the countryside in these desert areas occurred long before the coming of the white man. The plants and animals that survived were types which adjusted to such conditions. The area around the soak was largely composed of bare sand, patterned mainly with bird tracks. The natives camping in the area would gradually use up the available wood supply within easy reach of the water. This, together, with the grazing of animals coming into drink at the soak, would cause the bare sand to persist. Giles says (p. 207) "While at this water we occasionally saw hawks, crows, corellas, a pink feathered kind of cockatoo and black magpies which in some parts of the country are also called muttonbirds and pigeons. One day Peter Nicholls shot a queer kind of carrion bird, not so large as a crow, although its wings were as long. It had the peculiar dancing hop of the crows, its plumage was of a dark slate colour, with whitish tips to the wings, its beak was similar to a crow's." This last bird would be a Squeaker *(Strepera versicolor)* and the pink-feathered kind of cockatoo probably a Galah *(Kakatoe roseicapilla),* though it could also be a Major Mitchell Cockatoo *(Kakatoe leadbeateri).* The crows would be either *Corvus* *cecilae* or *Corvus bennetti.* Serventy and Whittell (*Handbook of the Birds of Western Australia,* Vol. 2) give the distribution of the Little Corella *(Kakatoe sanguinea)* as south to Meekatharra and Wiluna. The long-billed Corella *(Kakatoe tenuirostris)* is a south-west species. If this record is the Little Corella, it extends the possible range of the species. Giles before reaching the spring commented, "Tommy and others had also found a few lowan's *Leipoa ocellata* nests, and we secured a few of the pink-tinted eggs; this was the laying season. These with the turkey Mr. Young had shot on the plain were the only adjuncts to our supplies we had obtained from this region." Since the Spring was found on 26th September this occurrence of the eggs is not unexpected.

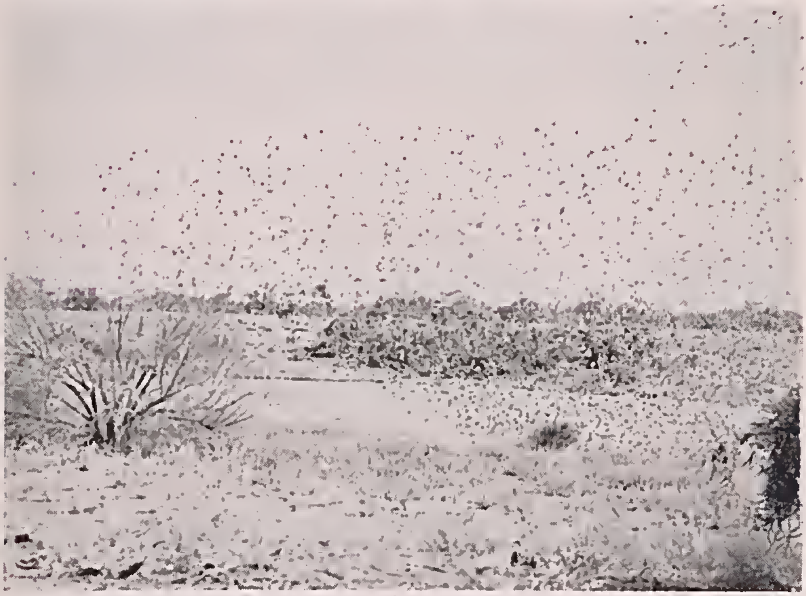

Fig. 1.—Budgerygahs flying past the claypan.
—Photo by Vincent Serventy

C. G. Gibson appears to be the next person to leave any published record of the bird life of the Spring in a paper entitled "Birds observed between Kalgoorlie and Eucla, W.A." (*Emu,* Vol. IX, p. 71). The only birds specifically mentioned as having been met with at the Spring are:—

"Little Falcon *(Falco lunulatus).* One specimen only (a female) obtained (or seen), near Queen Victoria Spring. Bush Bronzewing *(Phaps elegans).* A few were seen at Queen Victoria Springs."

The next published record appears to be that of Slater and Lindgren (*op. cit.*).

The main contrast between their records and the writer's is the paucity of species detected on this occasion. Only an evening and one morning were spent in the area. Discussion will be restricted to those birds about which fresh information was obtained.

Diamond Dove *(Geopelia cuneata)*. Two birds arrived to drink at the Spring at 0500 hours. Three hours later three more arrived. These birds were also met with at Randells and Zanthus.

Common Bronzewing *(Phaps chalcoptera)*. These birds were very common at the Spring. On our arrival at 1830 hours on 26th January, approximately 20 birds were gathered around the soak. The claypan was completely dry but the sand in the soak was damp. A tiny depression about half an inch across and a quarter of an inch deep held water. This appeared to have been made by the pigeons. With the cool of the evening the water level would rise slightly, once the evaporating power of the sun and wind had diminished. Also mammals could scratch out holes which would soon fill with water and provide a better supply. I short-circuited nature and dug out the soak with a spade. By 1920 hours the hole formed was almost full of water and the pigeons had increased to approximately 100. When disturbed they did not fly far, many resting in the claypan. Others rested in the everlastings *(Helichrysum apiculatum)* which surrounded the soak. Next morning at 0500 hours only one pigeon was seen. As mentioned before the sand around the Spring was patterned with footprints, many of which appeared to be pigeon tracks. The whole area had the odour of a large bird rookery, showing the large number of birds which were using the soak.

Little Falcon *(Falco longipennis)*. Two of these birds were seen in the area. They pursued budgerygahs, plunging through the masses of birds continually, but to my surprise, quite unsuccessfully. Later one of the falcons was seen with a bird, which was not identified but was definitely not a Budgerygah.

Brown Hawk *(Falco berigora)*. While I was watching the budgerygahs circling the Spring and the falcons plunging through them, a bird fell out of the flock and flew towards me at great speed. It struck a small tree then blundered into the branch on which I was sitting, finally crashing into the bush about ten yards behind me. Within seconds a Brown Hawk had landed and began to feed on the injured bird. On my approach it lifted the prey in its talons and flew. Later I erected a hide near the soak. While watching a few budgerygahs drinking, a hawk struck and picked up one bird. This was done so swiftly I was unable to identify the killer. Circling brown hawks also caused many of the drinking birds to rise in alarm. Earlier I saw two brown hawks lying in the water in the soak but whether for coolness or for the arrival of victims I do not know.

Boobook Owl *(Ninox novae-seelandiae)*. A bird was heard calling at night.

Purple-crowned Lorikeet *(Glossopsitta porphyrocephala)*. This bird was absent during my visit though very common when the Spring was visited by Slater and Lindgren. Since very little mallee was in flower at the time it emphasises how closely tied this bird is to the flowering of trees and shrubs.

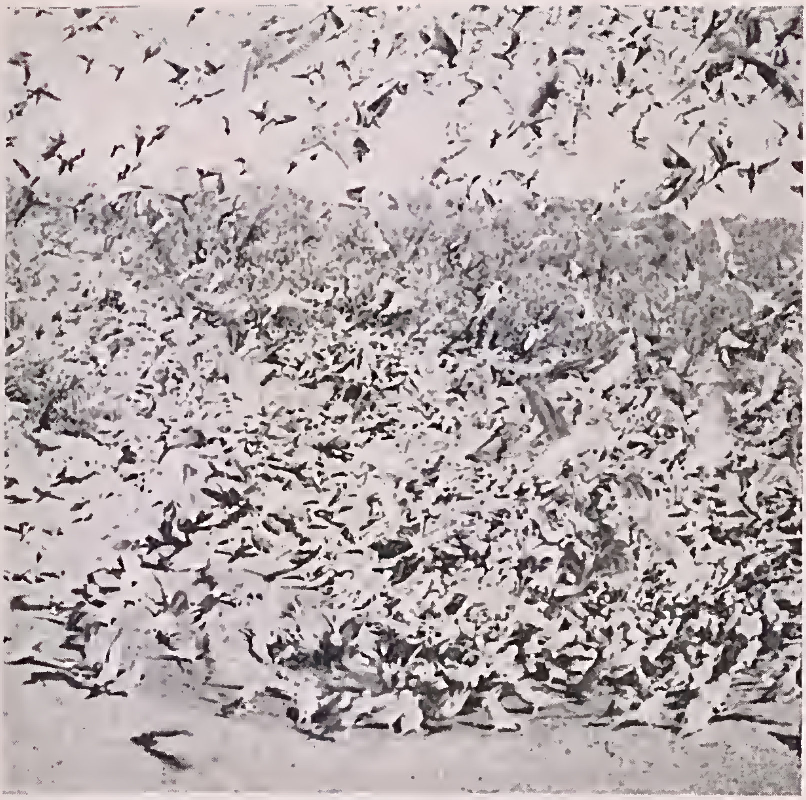

Fig. 2.—Budgerygahs at the soak.

—Photo by A. R. Main

Galah *(Kakatoe roseicapilla)*. At 0500 hours 15 were seen, and by 1945 hours these had drunk and gone. At 0810 hours when I was in the hide near the soak eight galahs landed and drank.

Cockatiel *(Leptolophus hollandicus)*. These were not seen at the Spring but occurred in numbers at Zanthus. They arrived at 0455 hours and by 0520 hours about 150 were present but none had attempted to drink. They were being forced from tree to tree by a Brown Hawk, but no actual attempt to catch a bird was made by the hawk.

Twenty-eight Parrot *(Barnardius zonarius)*. Only one bird was seen near the Spring.

Mulga Parrot *(Psephotus varius)*. A dead female was picked up on the track a few miles from the Spring.

Budgerygah *(Melopsittacus undulatus)*. This was the dominant member of the parrot family in the area. At 0500 hours a flock of 30 birds was seen flying over. It would appear the soak offered little in the way of water to these birds and they were headed for the water at Zanthus, about forty miles to the south. However, my deepening of the soak with the spade changed the position.

By 0845 hours large flocks were beginning to circle (Fig. 1). By 0915 hours these numbered several thousands. This grew into tens of thousands and some groups settled in the trees nearby or on the claypan. At a rough estimate about 20,000 birds would have been present. When in the hide I noticed that soon after a few less timid individuals had landed, a flock of several hundred would be drinking (Fig. 2). The whirr of wings splashed the water in all directions and this, as much as the water consumed or lost through evaporation, caused the drop in level. It was also noticed there was no real crowding, even when hundreds of birds were drinking. Drowned birds would seem to be individuals too weak to rise from the water and not pushed under by weight of numbers. It was noted that even when the main flock would rise satisfied, a few birds would be left behind. These walked into the shelter of the Centaury Plant *(Erythroea centaurium)* which ringed the soak. Attacks by hawks or threat of attacks kept the birds nervous throughout. When the soak was occupied by crows or galahs the budgerygahs made no attempt to drink.

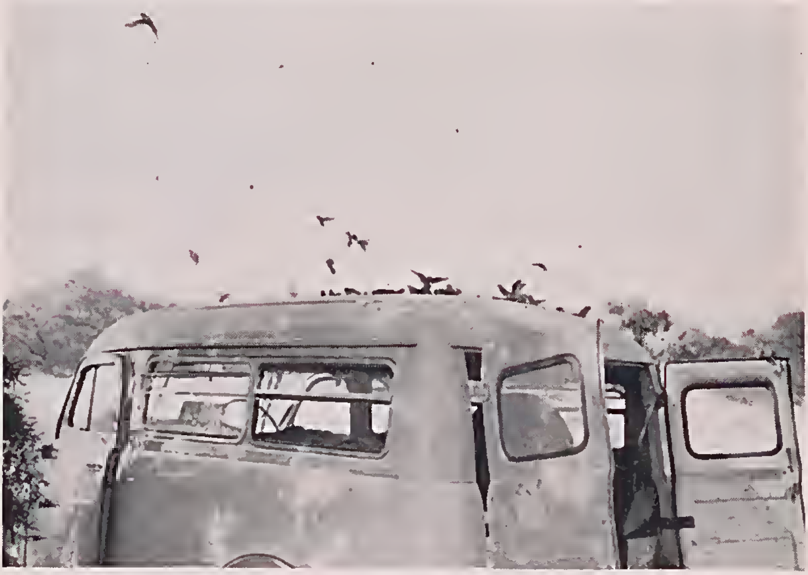

Fig. 3.—Budgerygahs on roof of truck.

—Photo by Vincent Serventy

On returning to the truck B. A. Y. and A. R. Main described how budgerygahs had landed on the white canopy and attempted to drink, apparently under the impression the white sheen of the enamel was water. Serventy and Whittell (*op. cit.*) describe how the Musk Duck *(Biziura lobata)* crashed into roofs on moonlit nights under the impression that galvanised iron was water. Next day we had the same experience of birds landing on the truck and again attempting to drink (Fig. 3). At Zanthus on 29th

January I found the budgerygahs arrived in small numbers at 0520 hours. These built up until by 0715 hours I estimated 100,000 birds were over the dam. The birds continued to arrive all morning but by about 1400 hours the birds had finished drinking and moved off to feed. At all times the birds appeared little afraid of man and one individual landed on B. A. Y. Main and drank water from her filled palm. At the dam the birds usually hovered helicopter fashion while drinking, touching only with their beaks. However, some floated with wings outstretched while drinking.

Red-backed Kingfisher *(Halcyon pyrrhopygia)*. A nest of this bird was found in the bank of Goddard's Creek. Chicks called when I blew softly near the entrance. Since Lindgren and Slater also found this bird with young, it would appear to be independent of the presence of water for beginning the nesting cycle.

Little Crow *(Corvus bennetti)*. Although no specimens were taken strong wind blew up the feathers of live birds, exposing the bases which were white. Since the birds were smaller than the galahs I therefore placed them as this species. About 30 birds perched in trees surrounding the soak. Probably they would feed on exhausted budgerygahs.

Apart from these notes there is little other information to add on the bird species which would be additional to that provided by Slater and Lindgren.

I am indebted to R. G. Royce for the identification of the plants mentioned in the text.

TROPICAL CYCLONES AS BIOCLIMATIC ACTIVATORS: Part II

By J. GENTILLI, Nedlands

THE SPREADING OF MOISTURE

The increase in humidity associated with tropical cyclones has an immediate effect on some aspects of animal life. Gentilli (1949) recorded a definite correlation between relative humidity and the call of the Willy Wagtail *(Rhipidura leucophrys)* in the Perth Metropolitan Area. This call fluctuates sporadically during most of the year, and only becomes regularly recurring during the mating and nesting season, during which relative humidity is nearly always higher than the minimum amount required to stimulate the bird. During the mating and nesting season—winter and spring—frontal cyclones dominate the weather. Some unseasonable summer calls are due to the bird's response to humidity brought by tropical cyclones or by low-pressure troughs associated with them in the middle latitudes. On December 12, 1948, calling was quite general—and relative humidity stood at 69 per cent.

The cumulative effect of tropical cyclones is noticeable in the mean rainfall. Over a large area which corresponds to the greatest